

Amendments to and Listing of the Claims:

Please cancel claims 1, 8, 11, 14 and 21 and amend claims 2, 5-6, 9, 15, 17 and 20 as follows:

1. (Canceled)

2. (Currently amended) A semiconductor device comprising:

an integrated circuit buffer having a delay generator, the buffer receiving that receives an input signal and generates generating a plurality of output signals that relate to the input signal, the delay generator being configured to phase-shift the timing of the plurality of output signals with respect to the input signal wherein the buffer includes a delay generator; and

a resistor having a resistance value, a first resistor end that is electrically connected to the delay generator and a second resistor end that is electrically connected to ground or a voltage reference, wherein the resistor [[is]] being external to the integrated circuit buffer, the resistance value determining a magnitude of the phase-shift caused by the delay generator.

3. (Original) The device of claim 2 wherein the buffer comprises a zero-delay buffer.

4. (Original) The device of claim 2 wherein the device is implemented on a circuit board and the external resistor is connected to a pin on a device package.

5. (Currently amended) ~~The device of claim 2 further comprising A~~
semiconductor device comprising:

an integrated circuit buffer having a delay generator, the buffer receiving an input signal and generating a plurality of output signals that relate to the input signal;

a resistor having a first resistor end that is electrically connected to the delay generator and a second resistor end that is electrically connected to ground or a voltage reference, the resistor being external to the integrated circuit buffer; and

a plurality of internal capacitors which are used in conjunction with [[an]] the external resistor for providing to provide a timing reference, each capacitor having a first capacitor end that is electrically connected to a current source and a second capacitor end that is electrically connected to ground or a voltage reference.

6. (Currently amended) The device of claim 2 wherein:

the buffer further includes a phase locked loop, the phase locked loop includes including a phase detector; and

the delay generator, a delay line and the external resistor are electrically connected to adjust the timing of an internal feedback signal before the feedback signal reaches the phase detector.

7. (Original) The device of claim 6 wherein the plurality of output signals are phase-shifted to have a timing that is advanced relative to the input signal.

8. (Canceled)

9. (Currently amended) The device of claim 2, wherein:

the buffer further includes a phase locked loop, the phase locked loop ~~includes~~
including a phase detector; and

the delay generator, a delay line and the external resistor are electrically
connected to adjust the timing of the input signal before the input signal reaches the phase
detector.

10. (Original) The device of claim 9 wherein the plurality of output signals are
phase-shifted to have a timing that is retarded relative to the input signal.

11. (Canceled)

12. (Original) The device of claim 2 wherein:

the buffer includes a phase locked loop; and

the delay generator, a delay line and the external resistor are electrically
connected to adjust the timing of one or more of the output signals exiting the phase locked loop
to yield adjusted output signals.

13. (Original) The device of claim 12 wherein the adjusted output signals are
phase-shifted to have a timing that is advanced or retarded relative to the input signal and the
remaining output signals.

14. (Canceled)

15. (Currently amended) A method of adjusting the timing of an output signal of a semiconductor device, comprising:

electrically connecting a first terminal of an external resistor to a buffer that generates a plurality of output signals, the external resistor having a resistance value and the buffer including a delay generator and a phase locked loop, the first terminal of the external resistor being electrically coupled to the delay generator; [[and]]

electrically connecting a second terminal of the external resistor to a ground or a voltage reference;

receiving a clock input signal in the buffer; and

phase-shifting wherein the buffer includes a delay generator and a phase locked loop, and the first terminal of the external resistor is electrically connected to the delay generator to adjust the timing of one or more of the output signals with respect to the clock input signal in an amount that is dependent upon the resistance value of the external resistor.

16. (Original) The method of claim 15 wherein the buffer comprises a zero-delay buffer.

17. (Currently amended) A semiconductor device, ~~comprising~~ comprising:
an input terminal ~~for receiving~~ that receives an input signal;

a buffer ~~for generating~~ that receives the input signal from the input terminal which is configured to generate a plurality of output signals and to phase-shift the timing of at least one of the plurality of output signals with respect to the input signal; and

an external resistor coupled between the buffer and ground or a voltage reference,
the external resistor having a resistance value that determines a magnitude of the phase-shift of at least ~~for altering a timing of one or more~~ of the plurality of output signals relative to ~~a timing of~~ the input signal.

18. (Original) The device of claim 17 wherein the buffer comprises a zero-delay buffer.

19. (Original) The device of claim 18 wherein the device is implemented on a circuit board and the external resistor is connected to a pin on a package of the device.

20. (Currently amended) The device of claim 18 wherein the ~~adjusted~~ at least one of the plurality of output signals are phase-shifted to have a timing that is advanced or retarded relative to the input signal and the remaining output signals.

21. (Canceled)